

Application No. 10/528,298
Amendment Dated: December 2, 2009
Reply to Office Action Dated July 2, 2009

Remarks

Claims 11-12 and 14-20 are pending.

Claims 1111-12 and 14-20 stand rejected.

Claims 11 and 20 have been amended.

Claims 11-12 and 14-20 are submitted herein for review.

No new matter has been added.

In paragraph 4 of the Office Action, the Examiner has rejected independent claim 11 under 35 U.S.C. § 103(a) as being obvious over Robertson (U.S. Patent No. 4,766,194). Independent claim 20 is separately rejected over Robertson in view of Miyake (EP 072,178) and Dunwald ('095).

Applicants respectfully disagree with the Examiner's contentions and submit the following remarks in response.

Independent claim 11, is directed to a process for preparing a self lubricating varnish. Among other elements, it includes carrying out a preparation of a modified diisocyanate in a solvent medium with stirring and heating, so that the heating *is to a temperature sufficient to cause a reaction between the isocyanate function group with the terminal functional group*. Independent claim 20 includes, among other elements a similar feature.

In forming the rejection, among other arguments, the Examiner is contending that in

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Robertson, "Component (A) is the reaction product triisocyanate, such as isocyanurate and/or biurets, with mono-function compounds having 10-40 aliphatic carbon atom chains (Col 2 lines 16-25; col 5 lines 27-29, 45; col 6 lines 3-6, 31-65; col 12, lines 25-28)."

A telephonic interview was conducted on September 29th, discussing this rejection. During the interview, the Examiner contended that the portion of Robertson (col 12, lines 25-30) states that if it is desired to incorporate the slip agent into the "A" compound, the slip agent *will prereact* with the polyisocyanate if it is a fatty alcohol or fatty amine. Thus, the Examiner argues that when this Robertson reference talks about "prereaction," it implies that the aliphatic chain is reacting with the triisocyanate first, and then the resultant combination is mixed with the polymer. The Examiner argues then that the term "prereact" in Robertson can teach or suggest a complete reaction and adding heat to ensure a well mixed compound is obvious.

In the present independent claims 11 and 20, the heating step ensures a complete reaction in a two step process. The Robertson reference states that "care should be taken to insure that the "A" component is **well mixed** by using propeller or paddle type stirrer. (col 12, lines 28-29).

However, Applicants respectfully submit that the Examiner is not correct in saying that "pre-reaction" as discussed in Robertson means that the elements are reacting and the additional stirring reference in Robertson ensures a complete reaction. One of ordinary skill in the art, starting from Robertson, would not have been prompted to heat to a sufficient temperature to cause the reaction between the isocyanate group with the terminal function group.

For example, the temperature of 30°C (eg. discussed on col 13, lines 24-37) is not sufficient to get a complete reaction, so that when Robertson talks about "prereaction," the reaction can not give a product with the same properties than those provided by the present invention. Because the long aliphatic chains, and more especially fatty chains, have very low

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reactivity especially at low temperature, the process describes by Robertson can not be compared with the process as present claimed in claims 11 and 20. The addition of a stirring step, as per Robertson, would still not be able as such to get a complete reaction as claimed.

Moreover, the present claim 11 and 20 call for a pendant aliphatic chain containing at least 15 carbon atoms. This amount of carbon atoms defines a relatively long aliphatic chain. Relatively long aliphatic chains, such as those cited in the pending claims, have very low reactivity, especially at low temperature. As such, the process described by Robertson can not be compared with the process claimed by the present invention. And simple stirring step or claim of "pre reaction" could not be able to provide a sufficient heating as such to get said complete reaction between the isocyanate function group and the terminal functional group.

Applicants concurrently submit herewith an affidavit under 37 CFR 1.132 signed by the chemical engineer Laurent Schildknecht arguing that the Robertson reference does not teach or suggest the elements of claims 11 and 20.

As such, there is no teaching or suggestion in Robertson, either alone or in combination with one another (regarding claim 20), that discloses all of the elements of the present independent claims 11 and 20. For example, there is no teaching or suggestion in either Robertson or the other cited references that discloses carrying out the preparation of the modified diisocyanate in a solvent medium with stirring and heating, so that the heating is to a temperature sufficient to cause a reaction between the isocyanate function group with the terminal functional group.

For at least the reasons set forth in this Amendment and the accompanying affidavit, Applicants submit that the cited prior art does not teach or suggest all of the elements of the prior


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art as claimed in independent claims 11 and 20, and respectfully request that the rejection of the claims be withdrawn. Because claims 12 and 14-19 depend from claims 11 and 20, these claims should be allowed for at least the same reasons.

In view of the foregoing, Applicants respectfully submit that pending claims 11-12 and 14-20 are in condition for allowance, the earliest possible notice of which is earnestly solicited. If the Examiner feels that an interview would facilitate the prosecution of this Application he is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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